Boundary of the River Corridor Protection Area (RCPA) (= Fluvial Erosion Hazard Area)

The RCPA is the minimal area required to accommodate the meander geometry and stable slope of the river's least erosive, equilibrium condition (i.e., belt width).

Old meander scars of the Lamoille River affirm the minimal meander belt width.



Boundary of the River Corridor Protection Area (RCPA=FEH)

The meander belt width represents the location where lateral channel migration may be arrested and still maintain the objective of achieving equilibrium conditions.

Waiting to stop lateral channel migration at the edge of the meander belt minimizes the risk of erosion of downstream riparian properties and public infrastructure.



Boundary of the River Corridor Protection Area (RCPA=FEH)

Present Day Lamoille River + 50 ft Buffer

Buffers are integral to stream stability in setting resistant boundaries and channel roughness that reduce flood velocities and erosive power.

Buffers (measured from the top of banks) may be completely outside RCPA when meanders and bank lines extend to the edge of the RCPA.



Boundary of the River Corridor Protection Area (RCPA=FEH) <u>Future</u> Lamoille River at Equilibrium Slope + 50" buffer

When river is in its least erosive form, vegetation may serve in lieu of costly rip-rap in arresting lateral channel migration.

The RCPA accommodates the river geometry at equilibrium but not a setback space for the buffer.



River Corridor

Boundary of the River Corridor

Boundary of the River Corridor Protection Area (RCPA=FEH)

<u>Future</u> Lamoille River at Equilibrium Slope + 50 ft Buffer

Act 110 requires the ANR to create River Corridors that include riparian buffers.

River Corridors provide a set-back area that includes the 50' buffer when the equilibrium slope is achieved and the meanders have become fully extended.



River Corridor

Boundary of the River Corridor

Lamoille River + 50 ft Buffer

Act 110 requires the ANR to provide maps and procedures to promote the municipal protection of River Corridors.

The Agency is aligning Act 250 guidance to protect the River Corridor and promote riparian buffers therein.

The Agency's position is that River Corridors should be included in the Agency's authority to adopt floodplain rules for municipally-exempt activities.

